

AMENDMENTS TO THE SPECIFICATION

On page 1, please delete the first paragraph under the title and insert in its place the following new paragraph.

This application is a U.S. National Phase Application of International Application No. PCT/US05/04714 filed on February 11, 2005 and asserts priority to U.S. Application Serial No. 10/845,057 filed on May 13, 2004, which is a continuing application of U.S. Application Serial Number 10/778,908 filed on February 13, 2004. The specifications of International Application No. PCT/US05/04714, U.S. Application Serial No. 10/845,057, and U.S. Application Serial Number 10/778,908 are is hereby incorporated by reference in their its entirety.

On pages 19-26, please delete Tables 1 through 4 and insert in its place the following new Tables 1 through 4:

Table 1: Human, Mouse and Rat microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
hsa-miR-100	<u>SEQ ID NO. 1</u> AACCCGUAGA UCCGAACUUGUG	<u>SEQ ID NO.307</u> CACAAGUUCGGAUCUACGGGUU
hsa-miR-103	<u>SEQ ID NO. 2</u> AGCAGCAUUGUACAGGGCUAUG	<u>SEQ ID NO.308</u> CAUAGCCCUGUACAAUGCUGCU
hsa-miR-105-5p	<u>SEQ ID NO. 3</u> UCAAAUGCUCAGACUCCUGUGG	<u>SEQ ID NO.309</u> CCACAGGAGUCUGAGCAUUUGA
hsa-miR-106a	<u>SEQ ID NO. 4</u> AAAAGUGCUUACAGUGCAGGUA	<u>SEQ ID NO.310</u> UACCUGCACUGUAAGCACUUUU
hsa-miR-106b	<u>SEQ ID NO. 5</u> UAAAGUGCUGACAGUGCAGAUUA	<u>SEQ ID NO.311</u> UAUCUGCACUGUCAGCACUUUA
hsa-miR-107	<u>SEQ ID NO. 6</u> AGCAGCAUUGUACAGGGCUAUC	<u>SEQ ID NO.312</u> GAUAGCCCUGUACAAUGCUGCU
hsa-miR-10b	<u>SEQ ID NO. 7</u> UACCCUGUAGAACCGAAUUUGU	<u>SEQ ID NO.313</u> ACAAAUUCGGUUCUACAGGGUA
hsa-miR-128b	<u>SEQ ID NO. 8</u> UCACAGUGAACCGGUCUCUUUC	<u>SEQ ID NO.314</u> GAAAGAGACCGGUUCACUGUGA
hsa-miR-130b	<u>SEQ ID NO. 9</u> CAGUGCAAUGAUGAAAGGGCAU	<u>SEQ ID NO.315</u> AUGCCCUUUCAUCAUUGCACUG
hsa-miR-140-3p	<u>SEQ ID NO. 10</u> UACCACAGGGUAGAACCACGGA	<u>SEQ ID NO.316</u> UCCGUGGUUCUACCCUGUGGUA
hsa-miR-142-5p	<u>SEQ ID NO. 11</u> CCCAUAAAGUAGAAAGCACUAC	<u>SEQ ID NO.317</u> GUAGUGCUUUCUACUUUAUGGG
hsa-miR-151-5p	<u>SEQ ID NO. 12</u> UCGAGGAGCUCACAGUCUAGUA	<u>SEQ ID NO.318</u> UACUAGACUGUGAGCUCCUCGA
hsa-miR-155	<u>SEQ ID NO. 13</u> UUA AUGCUAAUCGUGAUAGGGG	<u>SEQ ID NO.319</u> CCCCUAUCACGAUUAGCAUUA
hsa-miR-181a	<u>SEQ ID NO. 14</u> AACAUUCAACGCUGUCGGUGAG	<u>SEQ ID NO.320</u> CUCACCGACAGCGUUGAAUGUU
hsa-miR-181b	<u>SEQ ID NO. 15</u> AACAUUCAUUGCUGUCGGUGGG	<u>SEQ ID NO.321</u> CCCACCGACAGCAAUGAAUGUU
hsa-miR-181c	<u>SEQ ID NO. 16</u> AACAUUCAACCUGUCGGUGAGU	<u>SEQ ID NO.322</u> ACUCACCGACAGGUUGAAUGUU
hsa-miR-182	<u>SEQ ID NO. 17</u> UUUGGCAAUGGUAGAACUCACA	<u>SEQ ID NO.323</u> UGUGAGUUCUACCAUUGCCAAA
hsa-miR-183	<u>SEQ ID NO. 18</u> UAUGGCACUGGUAGAAUUCACU	<u>SEQ ID NO.324</u> AGUGAAUUCUACCAGUGCCAUA
hsa-miR-184	<u>SEQ ID NO. 19</u> UGGACGGAGAACUGAUAAAGGGU	<u>SEQ ID NO.325</u> ACCCUUAUCAGUUCUCCGUCCA
hsa-miR-185	<u>SEQ ID NO. 20</u> UGGAGAGAAAGGCAGUUCCUGA	<u>SEQ ID NO.326</u> UCAGGAACUGCCUUUCUCUCCA
hsa-miR-186	<u>SEQ ID NO. 21</u> CAAAGAAUUCUCCUUUUGGGCU	<u>SEQ ID NO.327</u> AGCCCAAAGGAGAAUUCUUUG
hsa-miR-187	<u>SEQ ID NO. 22</u> UCGUGUCUUGUGUUGCAGCCGG	<u>SEQ ID NO.328</u> CCGGCUGCAACACAAGACACGA
hsa-miR-188-3p	<u>SEQ ID NO. 23</u> CUCCCACAUGCAGGGUUUGCAG	<u>SEQ ID NO.329</u> CUGCAAACCCUGCAUGUGGGAG
hsa-miR-188-5p	<u>SEQ ID NO. 24</u> CAUCCCUUGCAUGGUGGAGGGU	<u>SEQ ID NO.330</u> ACCCUCCACCAUGCAAGGGAUG
hsa-miR-189	<u>SEQ ID NO. 25</u> GUGCCUACUGAGCUGAUUUCAG	<u>SEQ ID NO.331</u> CUGAUUUCAGCUCAGUAGGCAC
hsa-miR-190	<u>SEQ ID NO. 26</u> UGAUAUGUUUGAUUAUUAUAGGU	<u>SEQ ID NO.332</u> ACCUAAUAUAUCAAACAUUAUA
hsa-miR-191	<u>SEQ ID NO. 27</u> CAACGGAAUCCCAAAGCAGCU	<u>SEQ ID NO.333</u> AGCUGCUUUUGGGAUUCGGUUG
hsa-miR-192	<u>SEQ ID NO. 28</u> CUGACCUAUGAAUUGACAGCCA	<u>SEQ ID NO.334</u> UGGCUGUCAAUUCAUAGGUCAG
hsa-miR-193-3p	<u>SEQ ID NO. 29</u> AACUGGCCUACAAAGUCCAGU	<u>SEQ ID NO.335</u> ACUGGGACUUUGUAGGCCAGUU
hsa-miR-193-5p	<u>SEQ ID NO. 30</u> UGGGUCUUUGCGGGCAAGAUGA	<u>SEQ ID NO.336</u> UCAUCUUGCCCGCAAAGACCCA
hsa-miR-194	<u>SEQ ID NO. 31</u> UGUAAACAGCAACUCCAUGUGGA	<u>SEQ ID NO.337</u> UCCACAUGGAGUUGCUGUUACA
hsa-miR-195	<u>SEQ ID NO. 32</u> UAGCAGCACAGAAUAUUGGCA	<u>SEQ ID NO.338</u> UGCCAAUAUUAUCUGUGCUGCUA

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
hsa-miR-196	<u>SEQ ID NO. 33</u> UAGGUAGUUUCAUGUUGUUGGG	<u>SEQ ID NO.339</u> CCCAACAACAUGAAACUACCUA
hsa-miR-197	<u>SEQ ID NO. 34</u> UUCACCACCUUCUCCACCCAGC	<u>SEQ ID NO.340</u> GCUGGGUGGAGAAGGUGGUGAA
hsa-miR-198	<u>SEQ ID NO. 35</u> GGUCCAGAGGGGAGAUAGGUUC	<u>SEQ ID NO.341</u> GAACCUAUCUCCCCUCUGGACC
hsa-miR-199a-3p	<u>SEQ ID NO. 36</u> ACAGUAGUCUGCACAUUGGUUA	<u>SEQ ID NO.342</u> UAACCAAUGUGCAGACUACUGU
hsa-miR-199a-5p	<u>SEQ ID NO. 37</u> CCCAGUGUUCAGACUACCUGUU	<u>SEQ ID NO.343</u> AACAGGUAGUCUGAACACUGGG
hsa-miR-199b	<u>SEQ ID NO. 38</u> CCCAGUGUUUAGACUAUCUGUU	<u>SEQ ID NO.344</u> AACAGAUAGUCUAAACACUGGG
hsa-miR-200a	<u>SEQ ID NO. 39</u> UAACACUGUCUGGUAACGAUGU	<u>SEQ ID NO.345</u> ACAUCGUUACCAGACAGUGUUA
hsa-miR-200b	<u>SEQ ID NO. 40</u> CUCUAAUACUGCCUGGUAAUGA	<u>SEQ ID NO.346</u> UCAUUACCAGGCAGUAUUAGAG
hsa-miR-200c	<u>SEQ ID NO. 41</u> AAUACUGCCGGGUAAUGAUGGA	<u>SEQ ID NO.347</u> UCCAUCAUUACCCGGCAGUAUU
hsa-miR-203	<u>SEQ ID NO. 42</u> GUGAAAUGUUUAGGACCACUAG	<u>SEQ ID NO.348</u> CUAGUGGUCCUAAACAUUUCAC
hsa-miR-204	<u>SEQ ID NO. 43</u> UUCCCUUUGUCAUCCUAUGCCU	<u>SEQ ID NO.349</u> AGGCAUAGGAUGACAAAGGGAA
hsa-miR-205	<u>SEQ ID NO. 44</u> UCCUUCAUUCCACCGGAGUCUG	<u>SEQ ID NO.350</u> CAGACUCCGGUGGAAUGAAGGA
hsa-miR-206	<u>SEQ ID NO. 45</u> UGGAAUGUAAGGAAGUGUGUGG	<u>SEQ ID NO.351</u> CCACACACUCCCUACAUUGCA
hsa-miR-208	<u>SEQ ID NO. 46</u> AUAAGACGAGCAAAAAGCUUGU	<u>SEQ ID NO.352</u> ACAAGCUUUUUGCUCGUCUUAU
hsa-miR-210	<u>SEQ ID NO. 47</u> CUGUGCGUGUGACAGCGGCUGA	<u>SEQ ID NO.353</u> UCAGCCGCUGUCACACGCACAG
hsa-miR-211	<u>SEQ ID NO. 48</u> UUCCCUUUGUCAUCCUUCGCCU	<u>SEQ ID NO.354</u> AGGCGAAGGAUGACAAAGGGAA
hsa-miR-212	<u>SEQ ID NO. 49</u> UAACAGUCUCCAGUCACGGCCA	<u>SEQ ID NO.355</u> UGGCCGUGACUGGAGACUGUUA
hsa-miR-213	<u>SEQ ID NO. 50</u> ACCAUCGACCGUUGAUUGUACC	<u>SEQ ID NO.356</u> GGUACAAUCAACGGUCGAUGGU
hsa-miR-214	<u>SEQ ID NO. 51</u> ACAGCAGGCACAGACAGGCAGU	<u>SEQ ID NO.357</u> ACUGCCUGUCUGUGCCUGCUGU
hsa-miR-215	<u>SEQ ID NO. 52</u> AUGACCUAUGAAUUGACAGACA	<u>SEQ ID NO.358</u> UGUCUGUCAAUUCAUAGGUCAU
hsa-miR-216	<u>SEQ ID NO. 53</u> UAAUCUCAGCUGGCAACUGUGA	<u>SEQ ID NO.359</u> UCACAGUUGCCAGCUGAGAUUA
hsa-miR-217	<u>SEQ ID NO. 54</u> UACUGCAUCAGGAACUGAUUGG	<u>SEQ ID NO.360</u> CCAUUCAGUUCUGAUGCAGUA
hsa-miR-218	<u>SEQ ID NO. 55</u> UUGUGCUUGAUCUAACCAUGUG	<u>SEQ ID NO.361</u> CACAUGGUUAGAUAAGCACAA
hsa-miR-219	<u>SEQ ID NO. 56</u> UGAUUGUCCAAACGCAAUUCUU	<u>SEQ ID NO.362</u> AAGAAUUGCGUUUGGACAAUCA
hsa-miR-220	<u>SEQ ID NO. 57</u> CCACACCGUAUCUGACACUUUG	<u>SEQ ID NO.363</u> CAAAGUGUCAGAUACGGUGUGG
hsa-miR-221	<u>SEQ ID NO. 58</u> AGCUACAUUGUCUGCUGGGUUU	<u>SEQ ID NO.364</u> AAACCCAGCAGACAAUGUAGCU
hsa-miR-222	<u>SEQ ID NO. 59</u> AGCUACAUCUGGCUACUGGGUC	<u>SEQ ID NO.365</u> GACCCAGUAGCCAGAUGUAGCU
hsa-miR-223	<u>SEQ ID NO. 60</u> UGUCAGUUUGUCAAAUACCCCA	<u>SEQ ID NO.366</u> UGGGGUAUUUGACAAACUGACA
hsa-miR-224	<u>SEQ ID NO. 61</u> CAAGUCACUAGUGGUUCCGUUU	<u>SEQ ID NO.367</u> AAACGGAACCACUAGUGACUUG
hsa-miR-28-5p	<u>SEQ ID NO. 62</u> AAGGAGCUCACAGUCUAUUGAG	<u>SEQ ID NO.368</u> CUCAAUAGACUGUGAGCUCCUU
hsa-miR-290	<u>SEQ ID NO. 63</u> CUCAAACUGUGGGGGGCACUUUC	<u>SEQ ID NO.369</u> GAAAGUGCCCCCACAGUUUGAG
hsa-miR-296	<u>SEQ ID NO. 64</u> AGGGCCCCCCCCUCAUCCUGUU	<u>SEQ ID NO.370</u> AACAGGAUUGAGGGGGGGCCCU
hsa-miR-299	<u>SEQ ID NO. 65</u> UGGUUUACCGUCCCCACAUACAU	<u>SEQ ID NO.371</u> AUGUAUGUGGGACGGUAAACCA
hsa-miR-301	<u>SEQ ID NO. 66</u> CAGUGCAAUAGUAUUGUCAAAAG	<u>SEQ ID NO.372</u> CUUUGACAAUACUAUUGCACUG
hsa-miR-302	<u>SEQ ID NO. 67</u> UAAGUGCUUCCAUGUUUUGGUG	<u>SEQ ID NO.373</u> CACCAAACAUGGAAGCACUUA
hsa-miR-30e	<u>SEQ ID NO. 68</u> UGUAAACAUCCUUGACUGGAAG	<u>SEQ ID NO.374</u> CUUCCAGUCAAGGAUGUUUACA
hsa-miR-320	<u>SEQ ID NO. 69</u> AAAAGCUGGGUUGAGAGGGCGA	<u>SEQ ID NO.375</u> UCGCCUCUCAACCCAGCUUUU
hsa-miR-321	<u>SEQ ID NO. 70</u> UAAGCCAGGGAUUGUGGGUUCG	<u>SEQ ID NO.376</u> CGAACCCACAAUCCCUGGCUUA
hsa-miR-322	<u>SEQ ID NO. 71</u> AAACAUGAAUUGCUGCUGUAUC	<u>SEQ ID NO.377</u> GAUACAGCAGCAAUUCAUGUUU
hsa-miR-323	<u>SEQ ID NO. 72</u> GCACAUUACACGGUCGACCUCU	<u>SEQ ID NO.378</u> AGAGGUCGACCGUGUAAUGUGC
hsa-miR-324-3p	<u>SEQ ID NO. 73</u> CCACUGCCCCAGGUGCUGCUGG	<u>SEQ ID NO.379</u> CCAGCAGCACCUGGGGCAGUGG
hsa-miR-324-5p	<u>SEQ ID NO. 74</u> CGCAUCCCCUAGGGCAUUGGUG	<u>SEQ ID NO.380</u> CACCAUUGCCCUAGGGGAUGCG
hsa-miR-326	<u>SEQ ID NO. 75</u> CCUCUGGGCCCUUCCUCCAGCC	<u>SEQ ID NO.381</u> GGCUGGAGGAAGGGCCAGAGG
hsa-miR-328	<u>SEQ ID NO. 76</u> CUGGCCCUUCUGCCCUUCCGU	<u>SEQ ID NO.382</u> ACGGAAGGGCAGAGAGGGCCAG
hsa-miR-329	<u>SEQ ID NO. 77</u> AACACACCCAGCUAACCUUUUU	<u>SEQ ID NO.383</u> AAAAAGGUUAGCUGGGUGUGUU
hsa-miR-34a	<u>SEQ ID NO. 78</u> UGGCAGUGUCUUAAGCUGGUUGU	<u>SEQ ID NO.384</u> ACAACCAGCUAAGACACUGCCA
hsa-miR-34b	<u>SEQ ID NO. 79</u> AGGCAGUGUCAUUAAGCUGAUUG	<u>SEQ ID NO.385</u> CAUUCAGCUAAUGACACUGCCU
hsa-miR-34c	<u>SEQ ID NO. 80</u> AGGCAGUGUAGUUAAGCUGAUUG	<u>SEQ ID NO.386</u> CAUUCAGCUAACUACACUGCCU
hsa-miR-92	<u>SEQ ID NO. 81</u> UAUUGCACUUGUCCCGGCCUGU	<u>SEQ ID NO.387</u> ACAGGCCGGGACAAGUGCAAUA
hsa-miR-93	<u>SEQ ID NO. 82</u> AAAGUGCUGUUCGUGCAGGUAG	<u>SEQ ID NO.388</u> CUACCUGCACGAACAGCACUUU
hsa-miR-95	<u>SEQ ID NO. 83</u> UUCAACGGGUAAUUUAUUGAGCA	<u>SEQ ID NO.389</u> UGCUCAAUAAAUACCCGUUGAA
hsa-miR-96	<u>SEQ ID NO. 84</u> UUUGGCACUAGCACAUUUUUGC	<u>SEQ ID NO.390</u> GCAAAAUGUGCUAGUGCCAAA
hsa-miR-98	<u>SEQ ID NO. 85</u> UGAGGUAGUAAGUUGUAUUGUU	<u>SEQ ID NO.391</u> AACAAUACAACUUACUACCUCA
mmu-miR-106a	<u>SEQ ID NO. 86</u> CAAAGUGCUAACAGUGCAGGUA	<u>SEQ ID NO.392</u> UACCUGCACUGUUAGCACUUUG
mmu-miR-10b	<u>SEQ ID NO. 87</u> CCCUGUAGAACCGAAUUGUGU	<u>SEQ ID NO.393</u> ACACAAAUUCGGUUCUACAGGG

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
mmu-miR-135b	SEQ ID NO. 88 UAUGGCUUUUCAUUCCUAUGUG	SEQ ID NO.394 CACAUAGGAAUGAAAAGCCAUA
mmu-miR-148b	SEQ ID NO. 89 UCAGUGCAUCACAGAACUUUGU	SEQ ID NO.395 ACAAAGUUCUGUGAUGCACUGA
mmu-miR-151-3p	SEQ ID NO. 90 CUAGACUGAGGCUCCUUGAGGA	SEQ ID NO.396 UCCUCAAGGAGCCUCAGUCUAG
mmu-miR-155	SEQ ID NO. 91 UUA AUGCUAAUUGUGAUAGGGG	SEQ ID NO.397 CCCCUAUCACAAUAGCAUUA
mmu-miR-199b	SEQ ID NO. 92 CCCAGUGUUUAGACUACCUGUU	SEQ ID NO.398 AACAGGUAGUCUAAACACUGGG
mmu-miR-200b	SEQ ID NO. 93 UAAUACUGCCUGGUAUGAUGA	SEQ ID NO.399 UCAUCAUUACCAGGCAGUAUUA
mmu-miR-203	SEQ ID NO. 94 UGAAAUGUUUAGGACCACUAGA	SEQ ID NO.400 UCUAGUGGUCCUAAACAUUUA
mmu-miR-211	SEQ ID NO. 95 UUCCCUUUGUCAUCCUUGCCU	SEQ ID NO.401 AGGCAAAGGAUGACAAAGGGAA
mmu-miR-217	SEQ ID NO. 96 UACUGCAUCAGGAACUGACUGG	SEQ ID NO.402 CCAGUCAGUCCUGAUGCAGUA
mmu-miR-224	SEQ ID NO. 97 UAAGUCACUAGUGGUUCCGUUU	SEQ ID NO.403 AAACGGAACCACUAGUGACUUA
mmu-miR-28-3p	SEQ ID NO. 98 CACUAGA UUGUGAGCUGCUGGA	SEQ ID NO.404 UCCAGCAGCUCACAAUCUAGUG
mmu-miR-290	SEQ ID NO. 99 CUCAAACUAUGGGGGGCACUUU	SEQ ID NO.405 AAAAGUGCCCCCAUAGUUUGAG
mmu-miR-291-3p	SEQ ID NO. 100 AAAGUGCUUCCACUUUGUGUGC	SEQ ID NO.406 GCACACAAAGUGGAAGCACUUU
mmu-miR-291-5p	SEQ ID NO. 101 CAUCAAGUGGAGGCCUCUCU	SEQ ID NO.407 AGAGAGGGCCUCCACUUUGAUG
mmu-miR-292-3p	SEQ ID NO. 102 AAGUGCCGCCAGGUUUUGAGUG	SEQ ID NO.408 CACUCAAAACCUGGCGGCACUU
mmu-miR-292-5p	SEQ ID NO. 103 ACUCAAACUGGGGGCUCUUUUG	SEQ ID NO.409 CAAAAGAGCCCCCAGUUUGAGU
mmu-miR-293	SEQ ID NO. 104 AGUGCCGCAGAGUUUGUAGUGU	SEQ ID NO.410 ACACUACAAACUCUGCGGCACU
mmu-miR-294	SEQ ID NO. 105 AAAGUGCUUCCCUUUUGUGUGU	SEQ ID NO.411 ACACACAAAAGGGAAGCACUUU
mmu-miR-295	SEQ ID NO. 106 AAAGUGCUACUACUUUUGAGUC	SEQ ID NO.412 GACUCAAAAGUAGUAGCACUUU
mmu-miR-297	SEQ ID NO. 107 AUGUAUGUGUGCAUGUGCAUGU	SEQ ID NO.413 ACAUGCACAUGCACACAUACAU
mmu-miR-298	SEQ ID NO. 108 GGCAGAGGAGGGCUGUUCUUC	SEQ ID NO.414 GGAAGAACAGCCCUCCUCUGCC
mmu-miR-300	SEQ ID NO. 109 UAUGCAAGGGCAAGCUCUCUUC	SEQ ID NO.415 GAAGAGAGCUUGCCCUUGCAUA
mmu-miR-31	SEQ ID NO. 110 AGGCAAGAUGCUGGCAUAGCUG	SEQ ID NO.416 CAGCUAUGCCAGCAUCUUGCCU
mmu-miR-322	SEQ ID NO. 111 AAACAUGAAGCGCUGCAACACC	SEQ ID NO.417 GGUGUUGCAGCGCUUCAUGUUU
mmu-miR-325	SEQ ID NO. 112 CCUAGUAGGUGCUCAGUAAGUG	SEQ ID NO.418 CACUUACUGAGCACCUCUAGG
mmu-miR-326	SEQ ID NO. 113 CCUCUGGGCCCUUCCUCCAGUC	SEQ ID NO.419 GACUGGAGGAAGGGCCAGAGG
mmu-miR-330	SEQ ID NO. 114 GCAAAGCACAGGGCCUGCAGAG	SEQ ID NO.420 CUCUGCAGGCCUGUGCUUUGC
mmu-miR-331	SEQ ID NO. 115 GCCCCUGGGCCUAUCCUAGAAC	SEQ ID NO.421 GUUCUAGGAUAGGGCCAGGGGC
mmu-miR-337	SEQ ID NO. 116 UUCAGCUCCUAUAUGAUGCCU	SEQ ID NO.422 AAGGCAUCAUAUAGGAGCUGAA
mmu-miR-338	SEQ ID NO. 117 UCCAGCAUCAGUGAUUUUGUUG	SEQ ID NO.423 CAACAAAUCACUGAUGCUGGA
mmu-miR-339	SEQ ID NO. 118 UCCUGUCCUCCAGGAGCUCAC	SEQ ID NO.424 GUGAGCUCCUGGAGGACAGGGA
mmu-miR-340	SEQ ID NO. 119 UCCGUCUCAGUACUUUAUAGC	SEQ ID NO.425 GCUAUAAAGUAAACUGAGACGGA
mmu-miR-341	SEQ ID NO. 120 UCGAUCGGUCGGUCGGUCAGUC	SEQ ID NO.426 GACUGACCGACCGACCGAUCGA
mmu-miR-342	SEQ ID NO. 121 UCUCACACAGAAAUCGCACCCG	SEQ ID NO.427 CGGGUGCGAUUUCUGUGUGAGA
mmu-miR-344	SEQ ID NO. 122 UGAUCUAGCCAAAGCCUGACUG	SEQ ID NO.428 CAGUCAGGCUUUGGCUAGAUA
mmu-miR-345	SEQ ID NO. 123 UGCUGACCCCUAGUCCAGUGCU	SEQ ID NO.429 AGCACUGGACUAGGGGUCAGCA
mmu-miR-346	SEQ ID NO. 124 UGUCUGCCCGAGUGCCUGCCUC	SEQ ID NO.430 GAGGCAGGCACUCGGGCAGACA
mmu-miR-34b	SEQ ID NO. 125 UAGGCAGUGUAAUAGCUGAUU	SEQ ID NO.431 AAUCAGCUAAUACACUGCCUA
mmu-miR-350	SEQ ID NO. 126 UUCACAAAGCCCAUACACUUUC	SEQ ID NO.432 GAAAGUGUAUGGGCUUUGUGAA
mmu-miR-351	SEQ ID NO. 127 UCCUGAGGAGCCCUUUGAGCC	SEQ ID NO.433 GGCUCAAAGGGCUCCUCAGGGA
mmu-miR-7b	SEQ ID NO. 128 UGGAAGACUUGUGAUUUUGUUG	SEQ ID NO.434 CAACAAAUCACAAGUCUCCA
mmu-miR-92	SEQ ID NO. 129 UAUUGCACUUGUCCCGGCCUGA	SEQ ID NO.435 UCAGGCCGGGACAAGUGCAAUA
mmu-miR-93	SEQ ID NO. 130 CAAAGUGCUGUUCGUGCAGGUA	SEQ ID NO.436 UACCUGCACGAACAGCACUUUG
rno-miR-327	SEQ ID NO. 131 CCUUGAGGGGCAUGAGGGUAGU	SEQ ID NO.437 ACUACCCUCAUGCCCCUCAAGG
rno-miR-333	SEQ ID NO. 132 GUGGUGUGCUAGUUACUUUUGG	SEQ ID NO.438 CCAAAGUAACUAGCACACCAC
rno-miR-335	SEQ ID NO. 133 UCAAGAGCAAUAACGAAAAAUG	SEQ ID NO.439 CAUUUUUCGUUAUUGCUCUUGA
rno-miR-336	SEQ ID NO. 134 UCACCCUCCAUUAUCUAGUCUC	SEQ ID NO.440 GAGACUAGAUUUGGAAGGGUGA
rno-miR-343	SEQ ID NO. 135 UCUCCCUCCGUGUGCCAGUAU	SEQ ID NO.441 AUACUGGGCACACGGAGGGAGA
rno-miR-347	SEQ ID NO. 136 UGUCCCUUGGGUCGCCAGCU	SEQ ID NO.442 AGCUGGGCGACCCAGAGGGACA
rno-miR-349	SEQ ID NO. 137 CAGCCUGCUGUCUUAACCUCU	SEQ ID NO.443 AGAGGUUAAGACAGCAGGGCUG
rno-miR-352	SEQ ID NO. 138 AGAGUAGUAGGUUGCAUAGUAC	SEQ ID NO.444 GUACUAUGCAACCUACUACUCU

Table 2: Novel Human microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
hsa-miR-361	<u>SEQ ID NO. 139</u> UUAUCAGAAUCUCCAGGGGUAC	<u>SEQ ID NO.445</u> GUACCCCUGGAGAUUCUGAUAA
hsa-miR-362	<u>SEQ ID NO. 140</u> AAUCCUUGGAACCUAGGUGUGA	<u>SEQ ID NO.446</u> UCACACCUAGGUUCCAAGGAUU
hsa-miR-363	<u>SEQ ID NO. 141</u> AUUGCACGGUAUCCAUCUGUAA	<u>SEQ ID NO.447</u> UUACAGAUGGAUACCGUGCAAU
hsa-miR-364	<u>SEQ ID NO. 142</u> CGGCGGGGACGGCGAUUGGUCC	<u>SEQ ID NO.448</u> GGACCAAUCGCCGUCCCCGCCG
hsa-miR-365	<u>SEQ ID NO. 143</u> UAAUGCCCCUAAAAAUCCUUAU	<u>SEQ ID NO.449</u> AUAAGGAUUUUUAGGGGCAUUA
hsa-miR-366	<u>SEQ ID NO. 144</u> UAACUGGUUGAACAACUGAACC	<u>SEQ ID NO.450</u> GGUUCAGUUGUUCAACCAGUUA

Table 3: C. elegans microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Cel-let-7	SEQ ID NO. 145 UGAGGUAGUAGGUUGUAUAGUU	SEQ ID NO.451 AACUAUACAACCUACUACCUCA
Cel-lin-4	SEQ ID NO. 146 UCCCUGAGACCUCAAGUGUGAG	SEQ ID NO.452 CUCACACUUGAGGUCUCAGGGA
Cel-miR-1	SEQ ID NO. 147 UGGAAUGUAAAGAAGUAUGUAG	SEQ ID NO.453 CUACAUACUUCUUUACAUUCCA
Cel-miR-2	SEQ ID NO. 148 UAUCACAGCCAGCUUUGAUGUG	SEQ ID NO.454 CACAUCAAAGCUGGCUGUGAUA
Cel-miR-34	SEQ ID NO. 149 AGGCAGUGUGGUUAGCUGGUUG	SEQ ID NO.455 CAACCAGCUAACCACACUGCCU
Cel-miR-35	SEQ ID NO. 150 UCACCGGGUGGAAACUAGCAGU	SEQ ID NO.456 ACUGCUAGUUUCCACCCGGUGA
Cel-miR-36	SEQ ID NO. 151 UCACCGGGUGAAAAUUCGCAUG	SEQ ID NO.457 CAUGCGAAUUUUCACCCGGUGA
Cel-miR-37	SEQ ID NO. 152 UCACCGGGUGAACACUUGCAGU	SEQ ID NO.458 ACUGCAAGUGUUCACCCGGUGA
Cel-miR-38	SEQ ID NO. 153 UCACCGGGAGAAAAACUGGAGU	SEQ ID NO.459 ACUCCAGUUUUUCUCCCGGUGA
Cel-miR-39	SEQ ID NO. 154 UCACCGGGUGUAAAUCAGCUUG	SEQ ID NO.460 CAAGCUGAUUUACACCCGGUGA
Cel-miR-40	SEQ ID NO. 155 UCACCGGGUGUACAUCAGCUAA	SEQ ID NO.461 UUAGCUGAUGUACACCCGGUGA
Cel-miR-41	SEQ ID NO. 156 UCACCGGGUGAAAAAUCACCUA	SEQ ID NO.462 UAGGUGAUUUUUCACCCGGUGA
Cel-miR-42	SEQ ID NO. 157 CACCGGGUUAACAUCUACAGAG	SEQ ID NO.463 CUCUGUAGAUGUUAACCCGGUG
Cel-miR-43	SEQ ID NO. 158 UAUCACAGUUUACUUGCUGUCG	SEQ ID NO.464 CGACAGCAAGUAAACUGUGAUA
Cel-miR-44	SEQ ID NO. 159 UGACUAGAGACACAUCAGCUU	SEQ ID NO.465 AAGCUGAAUGUGUCUCUAGUCA
Cel-miR-45	SEQ ID NO. 160 UGACUAGAGACACAUCAGCUU	SEQ ID NO.466 AAGCUGAAUGUGUCUCUAGUCA
Cel-miR-46	SEQ ID NO. 161 UGUCAUGGAGUCGCUCUCUUCA	SEQ ID NO.467 UGAAGAGAGCGACUCCAUGACA
Cel-miR-47	SEQ ID NO. 162 UGUCAUGGAGGCGCUCUCUUCA	SEQ ID NO.468 UGAAGAGAGCGCCUCCAUGACA
Cel-miR-48	SEQ ID NO. 163 UGAGGUAGGCUCAGUAGAUGCG	SEQ ID NO.469 CGCAUCUACUGAGCCUACCUCA
Cel-miR-49	SEQ ID NO. 164 AAGCACCACGAGAAGCUGCAGA	SEQ ID NO.470 UCUGCAGCUUCUCGUGGUGCUU
Cel-miR-50	SEQ ID NO. 165 UGAUAUGUCUGGUUUCUUGGG	SEQ ID NO.471 CCCAAGAAUACCAGACAUAUCA
Cel-miR-51	SEQ ID NO. 166 UACCCGUAGCUCCUAUCCAUGU	SEQ ID NO.472 ACAUGGAUAGGAGCUACGGGUA
Cel-miR-52	SEQ ID NO. 167 CACCCGUACAUUUGUUUCCGUG	SEQ ID NO.473 CACGGAAACAUUUGUACGGGUG
Cel-miR-53	SEQ ID NO. 168 CACCCGUACAUUUGUUUCCGUG	SEQ ID NO.474 CACGGAAACAAUUGUACGGGUG
Cel-miR-54	SEQ ID NO. 169 UACCCGUAAUCUUCAUAAUCCG	SEQ ID NO.475 CGGAUUAUGAAGAUUACGGGUA
Cel-miR-55	SEQ ID NO. 170 UACCCGUAAUAGUUUCUGCUGA	SEQ ID NO.476 UCAGCAGAAACUUAUACGGGUA
Cel-miR-56	SEQ ID NO. 171 UACCCGUAAUGUUUCCGCUGAG	SEQ ID NO.477 CUCAGCGGAAACAUUACGGGUA
Cel-miR-57	SEQ ID NO. 172 UACCCUGUAGAUCGAGCUGUGU	SEQ ID NO.478 ACACAGCUCGAUCUACAGGGUA
Cel-miR-58	SEQ ID NO. 173 UGAGAUCGUUCAGUACGGCAAU	SEQ ID NO.479 AUUGCCGUACUGAACGAUCUCA
Cel-miR-59	SEQ ID NO. 174 UCGAAUCGUUUUUCAGGAUGAU	SEQ ID NO.480 AUCAUCCUGAUAAACGAUUCGA
Cel-miR-60	SEQ ID NO. 175 UAUUAUGCACAUUUUCUAGUUC	SEQ ID NO.481 GAACUAGAAAAUGUGCAUAAUA
Cel-miR-61	SEQ ID NO. 176 UGACUAGAACCGUUCUUCUUCU	SEQ ID NO.482 AGAUGAGUAACGGUUCUAGUCA
Cel-miR-62	SEQ ID NO. 177 UGAUAUGUAAUCUAGCUUACAG	SEQ ID NO.483 CUGUAAGCUAGAUUACAUAUCA
Cel-miR-63	SEQ ID NO. 178 AUGACACUGAAGCGAGUUGGAA	SEQ ID NO.484 UUCAACUCGCUUCAGUGUCAU
Cel-miR-64	SEQ ID NO. 179 UAUGACACUGAAGCGUUAACCGA	SEQ ID NO.485 UCGGUAAACGCUUCAGUGUCAU
Cel-miR-65	SEQ ID NO. 180 UAUGACACUGAAGCGUUAACCGA	SEQ ID NO.486 UCGGUUACGCUUCAGUGUCAU
Cel-miR-66	SEQ ID NO. 181 CAUGACACUGAUUAGGGAUGUG	SEQ ID NO.487 CACAUCCCUAAUCAGUGUCAUG
Cel-miR-67	SEQ ID NO. 182 UCACAACCUCCUAGAAAGAGUA	SEQ ID NO.488 UACUCUUUCUAGGAGGUUGUGA
Cel-miR-68	SEQ ID NO. 183 UCGAAGACUCAAAGUGUAGAC	SEQ ID NO.489 GUCUACACUUUUGAGUCUUCGA
Cel-miR-69	SEQ ID NO. 184 UCGAAAAUUAAGUGUAGAA	SEQ ID NO.490 UUCUACACUUUUUAAUUUUCGA
Cel-miR-70	SEQ ID NO. 185 UAAUACGUCGUUGGUGUUUCCA	SEQ ID NO.491 UGGAAACACCAACGACGUUUUA
Cel-miR-71	SEQ ID NO. 186 UGAAAGACAUGGGUAGUGAACG	SEQ ID NO.492 CGUUCACUACCCAUGUCUUUCA
Cel-miR-72	SEQ ID NO. 187 AGGCAAGAUGUUGGCAUAGCUG	SEQ ID NO.493 CAGCUAUGCCAACAUCUUGCCU
Cel-miR-73	SEQ ID NO. 188 UGGCAAGAUGUAGGCAUUCAG	SEQ ID NO.494 CUGAACUGCCUACAUCUUGCCA
Cel-miR-74	SEQ ID NO. 189 UGGCAAGAAUUGGCAGUCUACA	SEQ ID NO.495 UGUAGACUGCCAUUUCUUGCCA
Cel-miR-75	SEQ ID NO. 190 UUAAGCUACCAACCGGCUUCA	SEQ ID NO.496 UGAAGCCGGUUGGUAGCUUUAA
Cel-miR-76	SEQ ID NO. 191 UUCGUUGUUGAUGAAGCCUUGA	SEQ ID NO.497 UCAAGGCUUCAUCAACAACGAA
Cel-miR-77	SEQ ID NO. 192 UUCAUCAGGCCAUAGCUGUCCA	SEQ ID NO.498 UGGACAGCUAUGGCCUGAUGAA
Cel-miR-78	SEQ ID NO. 193 UGGAGGCCUGGUUGUUUGUGCU	SEQ ID NO.499 AGCACAAACAACCAGGCCUCCA
Cel-miR-79	SEQ ID NO. 194 AUAAAGCUAGGUUACCAAAGCU	SEQ ID NO.500 AGCUUUGGUAACCUAGCUUUUAU
Cel-miR-227	SEQ ID NO. 195 AGCUUUCGACAUGAUUCUGAAC	SEQ ID NO.501 GUUCAGAAUCAUGUCGAAAGCU
Cel-miR-80	SEQ ID NO. 196 UGAGAUCAUUAGUUGAAAGCCG	SEQ ID NO.502 CGGCUUUAACUAAUGAUCUCA
Cel-miR-81	SEQ ID NO. 197 UGAGAUCAUCGUGAAAGCUAGU	SEQ ID NO.503 ACUAGCUUUCACGAUGAUCUCA

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Cel-miR-82	<u>SEQ ID NO. 198</u> UGAGAUCAUCGUGAAAGCCAGU	<u>SEQ ID NO.504</u> ACUGGCUUUCACGAUGAUCUCA
Cel-miR-83	<u>SEQ ID NO. 199</u> UAGCACCAUAUAAAUUCAGUAA	<u>SEQ ID NO.505</u> UUACUGAAUUUAUAUGGUGCUA
Cel-miR-84	<u>SEQ ID NO. 200</u> UGAGGUAGUAUGUAAUAUUGUA	<u>SEQ ID NO.506</u> UACAAUAUUACAUAUACCUCA
Cel-miR-85	<u>SEQ ID NO. 201</u> UACAAAGUAUUUGAAAAGUCGU	<u>SEQ ID NO.507</u> ACGACUUUUCAAUAUACUUUGUA
Cel-miR-86	<u>SEQ ID NO. 202</u> UAAGUGAAUGCUUUGCCACAGU	<u>SEQ ID NO.508</u> ACUGUGGCAAAGCAUUCACUUA
Cel-miR-87	<u>SEQ ID NO. 203</u> GUGAGCAAAGUUCAGGUGUGC	<u>SEQ ID NO.509</u> GCACACCUGAAACUUUGCUCAC
Cel-miR-90	<u>SEQ ID NO. 204</u> UGAUAUGUUGUUUGAAUGCCCC	<u>SEQ ID NO.510</u> GGGGCAUUCAAACAACAUAUCA
Cel-miR-124	<u>SEQ ID NO. 205</u> UAAGGCACGCGGUGAAUGCCAC	<u>SEQ ID NO.511</u> GUGGCAUUCACCGCGUGCCUUA
Cel-miR-228	<u>SEQ ID NO. 206</u> AAUGGCACUGCAUGAAUUCACG	<u>SEQ ID NO.512</u> CGUGAAUUC AUGCAGUGCCA U
Cel-miR-229	<u>SEQ ID NO. 207</u> AAUGACACUGGUUAUCUUUUC	<u>SEQ ID NO.513</u> GGAAAAGAUAAACCAGUGUCAU
Cel-miR-230	<u>SEQ ID NO. 208</u> GUAUUAGUUGUGCGACCAGGAG	<u>SEQ ID NO.514</u> CUCCUGGUCGCACAACUAAUAC
Cel-miR-231	<u>SEQ ID NO. 209</u> UAAGCUCGUGAUCAACAGGCAG	<u>SEQ ID NO.515</u> CUGCCUGUUGAUCACGAGCUUA
Cel-miR-232	<u>SEQ ID NO. 210</u> UAAAUGCAUCUUAACUGCGGUG	<u>SEQ ID NO.516</u> CACCGCAGUUAAGAUGCAUUUA
Cel-miR-233	<u>SEQ ID NO. 211</u> UUGAGCAAUGCGCAUGUGCGGG	<u>SEQ ID NO.517</u> CCCGCACAUGCGCAUUGCUCAA
Cel-miR-234	<u>SEQ ID NO. 212</u> UUAUUGCUCGAGAAUACCCUUU	<u>SEQ ID NO.518</u> AAAGGGUAUUCUCGAGCAAUAA
Cel-miR-235	<u>SEQ ID NO. 213</u> UAUUGCACUCUCCCCGGCCUGA	<u>SEQ ID NO.519</u> UCAGGCCGGGGAGAGUGCAAUA
Cel-miR-236	<u>SEQ ID NO. 214</u> UAAUACUGUCAGGUAUUGACGC	<u>SEQ ID NO.520</u> GCGUCAUUAACCUGACAGUAUUA
Cel-miR-237	<u>SEQ ID NO. 215</u> UCCCUGAGAAUUCUCGAACAGC	<u>SEQ ID NO.521</u> GCUGUUCGAGAAUUCUCAGGGA
Cel-miR-238	<u>SEQ ID NO. 216</u> UUUGUACUCCGAUGCCAUCAG	<u>SEQ ID NO.522</u> CUGAAUGGCAUCGGAGUACAAA
Cel-miR-239a	<u>SEQ ID NO. 217</u> UUUGUACUACACAUAGGUACUG	<u>SEQ ID NO.523</u> CAGUACCUAUGUGUAGUACAAA
Cel-miR-239b	<u>SEQ ID NO. 218</u> UUUGUACUACACAAAAGUACUG	<u>SEQ ID NO.524</u> CAGUACUUUUGUGUAGUACAAA
Cel-miR-240	<u>SEQ ID NO. 219</u> UACUGGCCCCCAAUCUUCGCU	<u>SEQ ID NO.525</u> AGCGAAGAUUUGGGGGCCAGUA
Cel-miR-241	<u>SEQ ID NO. 220</u> UGAGGUAGGUGCGAGAAUUGAC	<u>SEQ ID NO.526</u> GUCAUUUCUCGCACCUACCUCA
Cel-miR-242	<u>SEQ ID NO. 221</u> UUGCGUAGGCCUUUGCUUCGAG	<u>SEQ ID NO.527</u> CUCGAAGCAAAGGCCUACGCAA
Cel-miR-243	<u>SEQ ID NO. 222</u> CGGUACGAUCGCGGCGGGGAUUA	<u>SEQ ID NO.528</u> AUAUCCCGCCGCGAUUCGUACCG
Cel-miR-244	<u>SEQ ID NO. 223</u> UCUUUGGUUGUACAAAGUGGUA	<u>SEQ ID NO.529</u> UACCACUUUGUACAACCAAAGA
Cel-miR-245	<u>SEQ ID NO. 224</u> AUUGGUCCCCUCCAAGUAGCUC	<u>SEQ ID NO.530</u> GAGCUACUUGGAGGGGACCAAU
Cel-miR-246	<u>SEQ ID NO. 225</u> UUACAUGUUUCGGGUAGGAGCU	<u>SEQ ID NO.531</u> AGCUCCUACCCGAAACAUGUAA
Cel-miR-247	<u>SEQ ID NO. 226</u> UGACUAGAGCCUAUUCUCUUCU	<u>SEQ ID NO.532</u> AGAAGAGAAUAGGCUCUAGUCA
Cel-miR-248	<u>SEQ ID NO. 227</u> UACACGUGCACGGAUAACGCUC	<u>SEQ ID NO.533</u> GAGCGUUAUCCGUGCACGUGUA
Cel-miR-249	<u>SEQ ID NO. 228</u> UCACAGGACUUUUGAGCGUUGC	<u>SEQ ID NO.534</u> GCAACGCUCAAAAGUCCUGUGA
Cel-miR-250	<u>SEQ ID NO. 229</u> UCACAGUCAACUGUUGGCAUGG	<u>SEQ ID NO.535</u> CCAUGCCAACAGUUGACUGUGA
Cel-miR-251	<u>SEQ ID NO. 230</u> UUAAGUAGUGGUGCCGCUCUUA	<u>SEQ ID NO.536</u> UAAGAGCGGCACCACUACUUA
Cel-miR-252	<u>SEQ ID NO. 231</u> UAAGUAGUAGUGCCGCAGGUAA	<u>SEQ ID NO.537</u> UUACCUGCGGCACUACUACUUA
Cel-miR-253	<u>SEQ ID NO. 232</u> CACACCUCACUAAACACUGACCA	<u>SEQ ID NO.538</u> UGGUCAGUGUUAGUGAGGUGUG
Cel-miR-254	<u>SEQ ID NO. 233</u> UGCAAAUCUUUCGCGACUGUAG	<u>SEQ ID NO.539</u> CUACAGUCGCGAAAGAUUUGCA
Cel-miR-256	<u>SEQ ID NO. 234</u> UGGAAUGCAUAGAAGACUGUAC	<u>SEQ ID NO.540</u> GUACAGUCUUCUAUGCAUUCCA
Cel-miR-257	<u>SEQ ID NO. 235</u> GAGUAUCAGGAGUACCCAGUGA	<u>SEQ ID NO.541</u> UCACUGGGUACUCCUGAUACUC
Cel-miR-258	<u>SEQ ID NO. 236</u> GGUUUUGAGAGGAAUCCUUUUA	<u>SEQ ID NO.542</u> UAAAAGGAUUCCUCUCAAACC
Cel-miR-259	<u>SEQ ID NO. 237</u> AGUAAAUCUCAUCCUAAUCUGG	<u>SEQ ID NO.543</u> CCAGAUUAGGAUGAGAUUUACU
Cel-miR-260	<u>SEQ ID NO. 238</u> GUGAUGUCGAACUCUUGUAGGA	<u>SEQ ID NO.544</u> UCCUACAAGAGUUCGACAUCAC
Cel-miR-261	<u>SEQ ID NO. 239</u> UAGCUUUUUAGUUUUCACGGUG	<u>SEQ ID NO.545</u> CACCGUGAAAACUAAAAAGCUA
Cel-miR-262	<u>SEQ ID NO. 240</u> GUUUCUCGAUGUUUUCUGAUAC	<u>SEQ ID NO.546</u> GUAUCAGAAAACAUCGAGAAAC
Cel-miR-264	<u>SEQ ID NO. 241</u> GCGGGUGGUUGUUGUUAUGGG	<u>SEQ ID NO.547</u> CCCAUACAACAACCAACCCGCC
Cel-miR-265	<u>SEQ ID NO. 242</u> UGAGGGAGGAAGGGUGGUUUU	<u>SEQ ID NO.548</u> AAAUACCACCCUCCUCCCUCA
Cel-miR-266	<u>SEQ ID NO. 243</u> AGGCAAGACUUUGGCAAAGCUU	<u>SEQ ID NO.549</u> AAGCUUUGCCAAAGUCUUGCCU
Cel-miR-267	<u>SEQ ID NO. 244</u> CCCGUGAAGUGUCUGCUGCAAU	<u>SEQ ID NO.550</u> AUUGCAGCAGACACUUCACGGG
Cel-miR-268	<u>SEQ ID NO. 245</u> GGCAAGAAUUGAAGCAGUUUG	<u>SEQ ID NO.551</u> CAAACUGCUUCUAAUUCUUGCC
Cel-miR-269	<u>SEQ ID NO. 246</u> GGCAAGACUCUGGCAAAACUUG	<u>SEQ ID NO.552</u> CAAGUUUUGCCAGAGUCUUGCC
Cel-miR-270	<u>SEQ ID NO. 247</u> GGCAUGAUGUAGCAGUGGAGAU	<u>SEQ ID NO.553</u> AUCUCCACUGCUACAUC AUGCC
Cel-miR-271	<u>SEQ ID NO. 248</u> UCGCCGGGUGGGAAAGCAUUCG	<u>SEQ ID NO.554</u> CGAAUGCUUUC CCAACCCGGCGA
Cel-miR-272	<u>SEQ ID NO. 249</u> UGUAGGCAUGGGUGUUUGGAAG	<u>SEQ ID NO.555</u> CUUCCAAACACCCAUGCCUACA
Cel-miR-273	<u>SEQ ID NO. 250</u> UGCCC GUACUGUGUCGGCUGCU	<u>SEQ ID NO.556</u> AGCAGCCGACACAGUACGGGCA

Table 4: Drosophila microRNA and anti-microRNA sequences.

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')	*
Dme-miR-263a	SEQ ID NO. 251 GUUAAUGGCACUGGAAGAAUUC	SEQ ID NO.557 GAAUUCUCCAGUGCCAUAUAAAC	
Dme-miR-184	SEQ ID NO. 252 UGGACGGAGAACUGAUAAAGGGC	SEQ ID NO.558 GCCCUUAUCAGUUCUCCGUCCA	
Dme-miR-274	SEQ ID NO. 253 UUUUGUGACCGACACUAACGGG	SEQ ID NO.559 CCCGUUAGUGUCGGUCACAAAA	
Dme-miR-275	SEQ ID NO. 254 UCAGGUACCUGAAGUAGCGCGC	SEQ ID NO.560 GCGCGCUACUUCAGGUACCUGA	
Dme-miR-92a	SEQ ID NO. 255 CAUUGCACUUGUCCCGGCCUAU	SEQ ID NO.561 AUAGGCCGGGACAAGUGCAAUG	
Dme-miR-219	SEQ ID NO. 256 UGAUUGUCCAAACGCAAUUCUU	SEQ ID NO.562 AAGAAUUGCGUUUGGACAAUCA	
Dme-miR-276a	SEQ ID NO. 257 UAGGAACUUCAUACCGUGCUCU	SEQ ID NO.563 AGAGCACGGUAUGAAGUUCUA	
Dme-miR-277	SEQ ID NO. 258 UAAAUGCACUAUCUGGUACGAC	SEQ ID NO.564 GUCGUACCAGAUAGUGCAUUA	
Dme-miR-278	SEQ ID NO. 259 UCGGUGGGACUUUCGUCCGUUU	SEQ ID NO.565 AAACGGACGAAAGUCCCACCGA	
Dme-miR-133	SEQ ID NO. 260 UUGGUCCCCUUAACCAGCUGU	SEQ ID NO.566 ACAGCUGGUUGAAGGGGACCAA	
Dme-miR-279	SEQ ID NO. 261 UGACUAGAUAUCCACACUCAUAA	SEQ ID NO.567 UUAUAGAGUGUGGAUCUAGUCA	
Dme-miR-33	SEQ ID NO. 262 AGGUGCAUUGUAGUCGCAUUGU	SEQ ID NO.568 ACAAUGCGACUACAAUGCACCU	
Dme-miR-280	SEQ ID NO. 263 UGUUUUUACGUUGCAUAUGAAA	SEQ ID NO.569 UUUCAUAUGCAACGUAAAUAACA	
Dme-miR-281	SEQ ID NO. 264 UGUCAUGGAAUUGCUCUCUUUG	SEQ ID NO.570 CAAAGAGAGCAAUCCAUGACA	
Dme-miR-282	SEQ ID NO. 265 AAUCUAGCCUCUACUAGGCUUU	SEQ ID NO.571 AAAGCCUAGUAGAGGCUAGAUU	
Dme-miR-283	SEQ ID NO. 266 UAAAUUAUCAGCUGGUAAUUCUG	SEQ ID NO.572 CAGAAUUACCAGCUGAUUUUA	
Dme-miR-284	SEQ ID NO. 267 UGAAGUCAGCAACUUGAUUCCA	SEQ ID NO.573 UGGAAUCAAGUUGCUGACUUA	
Dme-miR-34	SEQ ID NO. 268 UGGCAGUGUGGUUAGCUGGUUG	SEQ ID NO.574 CAACCAGCUAACACACUGCCA	
Dme-miR-124	SEQ ID NO. 269 UAAGGCACGCGGUGAAUGCCAA	SEQ ID NO.575 UUGGCAUUCACCGCGUGCCUUA	
Dme-miR-79	SEQ ID NO. 270 UAAAGCUAGAUUACCAAAGCAU	SEQ ID NO.576 AUGCUUUGGUAAUCUAGCUUA	
Dme-miR-276b	SEQ ID NO. 271 UAGGAACUUAUACCGUGCUCU	SEQ ID NO.577 AGAGCACGGUAUUAAGUUCUA	
Dme-miR-210	SEQ ID NO. 272 UUGUGCGUGUGACAGCGGCUAU	SEQ ID NO.578 AUAGCCGUGUCACACGCACAA	
Dme-miR-285	SEQ ID NO. 273 UAGCACCAUUCGAAAUUCAGUGC	SEQ ID NO.579 GCACUGAUUUCGAAUGGUGCUA	
Dme-miR-100	SEQ ID NO. 274 AACCCGUAAAUCCGAACUUGUG	SEQ ID NO.580 CACAAGUUCGGAUUUACGGGUU	
Dme-miR-92b	SEQ ID NO. 275 AAUUGCACUAGUCCCGGCCUGC	SEQ ID NO.581 GCAGGCCGGGACUAGUGCAAUU	
Dme-miR-286	SEQ ID NO. 276 UGACUAGACCGAACACUCGUGC	SEQ ID NO.582 GCACGAGUGUUCGGUCUAGUCA	
Dme-miR-287	SEQ ID NO. 277 UGUGUUGAAAUCGUUUGCACG	SEQ ID NO.583 CGUGCAAACGAUUUUAACACA	
Dme-miR-87	SEQ ID NO. 278 UUGAGCAAAAUUUCAGGUGUGU	SEQ ID NO.584 ACACACCUGAAAUUUUGCUCAA	
Dme-miR-263b	SEQ ID NO. 279 CUUGGCACUGGGAGAAUUCACA	SEQ ID NO.585 UGUGAAUUCUCCAGUGCCAAG	
Dme-miR-288	SEQ ID NO. 280 UUUCAUGUCGAUUUCAUUUCAU	SEQ ID NO.586 AUGAAAUGAAAUCGACAUGAAA	
Dme-miR-289	SEQ ID NO. 281 UAAAUUUUAAGUGGAGCCUGC	SEQ ID NO.587 GCAGGCUCACUUAUUUAUUUA	
Dme-bantam	SEQ ID NO. 282 UGAGAUCAUUUUGAAAGCUGAU	SEQ ID NO.588 AUCAGCUUUCAAAUGAUCUCA	
Dme-miR-303	SEQ ID NO. 283 UUUAGGUUUCACAGGAAACUGG	SEQ ID NO.589 CCAGUUUCCUGUGAAACCUAAA	
Dme-miR-31b	SEQ ID NO. 284 UGGCAAGAUGUCGGAUAGCUG	SEQ ID NO.590 CAGCUAUUCCGACAUCUUGCCA	
Dme-miR-304	SEQ ID NO. 285 UAAUCUCAUUUGUAAAUGUGA	SEQ ID NO.591 UCACAUUUACAAAUUGAGAUUA	
Dme-miR-305	SEQ ID NO. 286 AUUGUACUUCUACAGGUGCUCU	SEQ ID NO.592 AGAGCACCUGAUGAAGUACAAU	
Dme-miR-9c	SEQ ID NO. 287 UCUUUGGUUUUCUAGCUGUAGA	SEQ ID NO.593 UCUACAGCUAGAAUACCAAAGA	
Dme-miR-306	SEQ ID NO. 288 UCAGGUACUAGUGACUCUCAA	SEQ ID NO.594 UUGAGAGUCACUAAGUACCUGA	
Dme-miR-9b	SEQ ID NO. 289 UCUUUGGUGAUUUUAGCUGUAU	SEQ ID NO.595 AUACAGCUAAAAUCACCAAAGA	
Dme-miR-125	SEQ ID NO. 290 UCCCUGAGACCCUAACUUGUGA	SEQ ID NO.596 UCACAAGUUAGGGUCUCAGGGA	
Dme-miR-307	SEQ ID NO. 291 UCACAACCUCUUGAGUGAGCG	SEQ ID NO.597 CGCUCACUCAAGGAGGUUGUGA	
Dme-miR-308	SEQ ID NO. 292 AAUCACAGGAUUAUACUGUGAG	SEQ ID NO.598 CUCACAGUAUAUCCUGUGAUU	
dme-miR-31a	SEQ ID NO. 293 UGGCAAGAUGUCGGCAUAGCUG	SEQ ID NO.599 CAGCUAUGCCGACAUCUUGCCA	
dme-miR-309	SEQ ID NO. 294 GCACUGGGUAAAGUUUGUCCUA	SEQ ID NO.600 UAGGACAAACUUUACCCAGUGC	
dme-miR-310	SEQ ID NO. 295 UAUUGCACACUCCCGGCCUUU	SEQ ID NO.601 AAAGGCCGGGAAGUGUGCAAUA	
dme-miR-311	SEQ ID NO. 296 UAUUGCACAUUCACCGGCCUGA	SEQ ID NO.602 UCAGGCCGGUGAAUGUGCAAUA	
dme-miR-312	SEQ ID NO. 297 UAUUGCACUUGAGACGGCCUGA	SEQ ID NO.603 UCAGGCCGUCUCAAGUGCAAUA	
dme-miR-313	SEQ ID NO. 298 UAUUGCACUUUUCACAGCCCGA	SEQ ID NO.604 UCGGGCUGUGAAAAGUGCAAUA	
dme-miR-314	SEQ ID NO. 299 UAUUCGAGCCAAUAAGUUCGG	SEQ ID NO.605 CCGAACUUUUGGCUCGAAUA	
dme-miR-315	SEQ ID NO. 300 UUUUGAUUGUUGCUCAGAAAGC	SEQ ID NO.606 GCUUUCUGAGCAACAAUCAA	
dme-miR-316	SEQ ID NO. 301 UGUCUUUUUCCGCUUACUGGCG	SEQ ID NO.607 CGCCAGUAAGCGGAAAAGACA	
dme-miR-317	SEQ ID NO. 302 UGAACACAGCUGGUGGUUAUCCA	SEQ ID NO.608 UGGAUACCACCAGCUGUGUUA	
dme-miR-318	SEQ ID NO. 303 UCACUGGGCUUUGUUUAUCUCA	SEQ ID NO.609 UGAGAUAAACAAAGCCCAGUGA	
dme-miR-2c	SEQ ID NO. 304 UAUCACAGCCAGCUUUGAUGGG	SEQ ID NO.610 CCAUCAAAAGCUGGCUGUGUA	

microRNA name	microRNA sequence (5' to 3')	Anti-microRNA molecule sequence (5' to 3')
Dme-miR-iab45p	<u>SEQ ID NO. 305</u> ACGUAUACUGAAUGUAUCCUGA	<u>SEQ ID NO.611</u> UCAGGAUACAUCAGUAUACGU
Dme-miR-iab43p	<u>SEQ ID NO. 306</u> CGGUAUACCUUCAGUAUACGUA	<u>SEQ ID NO.612</u> UACGUAUACUGAAGGUAUACCG

On page 27, please delete the first full paragraph and insert in its place the following new paragraph:

The sequences of the 2'-O-methyl oligoribonucleotides were 5'-GUCAACAUCAGUCUGAUAAAGCUAL (L, 3' aminolinker) for 2'-OMe miR-21 (SEQ ID NO. 613), and 5'-AAGGCAAGCUGACCCUGAAGUL for EGFP 2'-OMe antisense (SEQ ID NO. 614), 5'-UGAAGUCCCAGUCGAACGGAAL for EGFP 2'-OMe reverse (SEQ ID NO. 615); the sequence of chimeric 2'-OMe/DNA oligonucleotides was 5'-GTCAACATCAGTCTGATAAGCTAGCGL for 2'-deoxy miR-21 (underlined, 2'-OMe residues) (SEQ ID NO. 616), and 5'-AAGGCAAGCTGACCCTGAAGTGCGL for EGFP 2'-deoxy antisense (SEQ ID NO. 617).

On page 27, please delete the second full paragraph and insert in its place the following new paragraph:

The miR-21 cleavage substrate was prepared by PCR-based extension of the partially complementary synthetic DNA oligonucleotides 5'-GAACAATTGCTTTTACAGATGCACATATCGAGGTGAACATCACGTACGTCAACATCAGTCTGATAAGCTATCGGTTGGCAGAAGCTAT (SEQ ID NO. 618) and 5'-GGCATAAAGAATTGAAGAGAGTTTTCACTGCATACGACGATTCTGTGATTTGTATTTCAGCCCATATCGTTTCATAGCTTCTGCCAACCGA (SEQ ID NO. 619). The extended dsDNA was then used as template for a new PCR with primers 5'-TAATACGACTCACTATAGAACAATTGCTTTTACAG (SEQ ID NO. 620) and 5'-ATTTAGGTGACACTATAGGCATAAAGAATTGAAGA (SEQ ID NO. 621) to introduce the T7 and SP6 promoter sequences for in vitro transcription. The PCR product was ligated into pCR2.1-TOPO (Invitrogen). Plasmids isolated from sequence-verified clones were used as templates for PCR to produce sufficient template for run-off in vitro transcription reactions using phage RNA polymerases (Elbashir et al., EMBO 20, 6877-6888 (2001)). ³²P-Cap-labelling was performed as reported (Martinez et al., Cell 110, 563-574 (2002)).

On page 27, please delete the paragraph bridging page 27 and 28 and insert in its place the following new paragraph:

Plasmids pEGFP-S-21 and pEGFP-A-21 were generated by T4 DNA ligation of preannealed oligodeoxynucleotides 5'-GGCCTCAACATCAGTCTGATAAGCTAGGTACCT (SEQ ID NO. 622) and 5'-GGCCAGGTACCTAGCTTATCAGACTGATGTTGA (SEQ ID NO. 623) into NotI digested pEGFP-N-1 (Clontech). The plasmid pHcRed-C1 was from Clontech.